

Atty. Docket No. KOYOP101USA

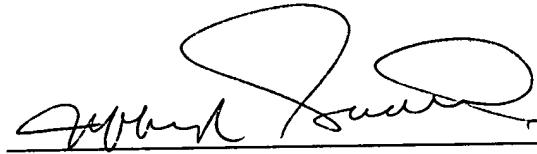
GARMENT AND DETACHABLE GARMENT LINER
HAVING A SECURE AND INTEGRATED
POCKET SYSTEM

by

Jeasung Jay Yoo

MAIL CERTIFICATION

I hereby certify that the attached patent application (along with any other paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on this date February 5, 2004, in an envelope as "Express Mail Post Office to Addressee" Mailing Label Number EV373131288US addressed to the Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.



Jeffrey R. Sadlowski

Title: GARMENT AND DETACHABLE GARMENT LINER HAVING A SECURE
AND INTEGRATED POCKET SYSTEM

CROSS-REFERENCE TO RELATED APPLICATIONS

5 This application claims priority to U.S. Provisional Patent Application No. 60/445,588 filed on February 6, 2003, entitled GARMENT AND DETACHABLE GARMENT LINER HAVING A SECURE ANG INTEGRATED POCKET SYSTEM, the entirety of which is incorporated herein by reference.

10

TECHNICAL FIELD

The present invention relates generally to a garment, and, more particularly to garment and/or a vest/liner, for example, having a secure, integrated pocket system.

BACKGROUND OF THE INVENTION

15 Advances in technology have lead to an increase in the amount of item(s) people carry. For example, many business travelers carry mobile telephone(s), personal digital assistant(s), MP3 player(s), travel document(s) (e.g., boarding pass), identification card(s) and small items such as key(s), money *etc.* It can be a cumbersome and/or daunting task to carry, manage, easily access and/or protect these item(s).

20

SUMMARY OF THE INVENTION

25 The following presents a simplified summary of the invention in order to provide a basic understanding of some aspects of the invention. This summary is not an extensive overview of the invention. It is not intended to identify key/critical elements of the invention or to delineate the scope of the invention. Its sole purpose is to present some concepts of the invention in a simplified form as a prelude to the more detailed description that is presented later.

An outer garment that can be fashionably acceptable for either business and/or casual use is provided. The outer garment can, optionally, include inner pocket(s), for 30 example, sewn in a lining attached to the outer garment. The inner pocket(s) are

generally accessible from an inner surface of the outer garment. Optionally, the inner pocket(s) can be accessible from an outer surface of the outer garment through an access slit (*e.g.*, hidden and/or unnoticeable) of the outer garment.

5 In one example, one or more of the inner pocket(s) comprise means for securing (*e.g.*, zipper, flexible hook and loop fastener system, snap, button(s) and/or, hook-and-eye *etc.*). In this example, the one or more inner pocket(s) comprise means for securing that facilitate secure storage of personal item(s) (*e.g.*, mobile telephone, personal digital assistant, personal audio system, MP3 player, money, jewelry, keys, travel document(s), credit card(s), identification card(s) *etc.*).

10 Further, in combination with a removable vest/liner, the outer garment facilitates a wearer to secure and/or conceal the inner pocket(s) of the outer garment. For example, the inner pocket(s) can be secured and concealed by the vest/liner before the wearer enters an airport security check point, thus enabling the wearer to submit the outer garment for security x-ray without fear of spillage of content(s) of the inner pocket(s) 15 (*e.g.*, mitigation of lost and/or stolen content(s)). In this manner, the wearer of the outer garment can, for example, expedite passage through airport security (*e.g.*, by avoiding the necessity of having to empty pocket(s) of various metal object(s)).

20 In one example, one or more of the inner pocket(s) comprise a material impervious to blades. One or more of the inner pocket(s) can further comprise a locking mechanism, for example, a zipper with a lock and/or wire tie. In this manner, the inner pocket(s) comprising a material impervious to blades can impede unauthorized person(s) (*e.g.*, thief) from access to content(s) of the inner pocket(s).

25 In another example, the inner pocket(s) are located generally symmetrically about a longitudinal axis at about the center of the outer garment. In this example, weight can be substantially evenly distributed over a torso of the wearer, for example, for ease of carrying items. Thus, substantially even weight distribution of item(s) carried by a typical wearer about the wearer's torso can facilitate, for example, to reduce the weight that otherwise is carried by either hand, *e.g.* in a briefcase or carry-on bag.

30 In accordance with an aspect of the present invention, a vest/liner having an inner surface and an outer surface is provided.

In one example, the vest/liner can be attached to the outer garment, for example, via fastener(s) (e.g., zipper, flexible hook and loop fastener system, Velcro, snap, button(s) and/or, hook-and-eye *etc.*). Thus, the vest/liner can be worn attached to the outer garment or detached from the outer garment, for example, at a wearer's preference.

5 Thus, in this example, the vest/liner and/or the outer garment can be worn individually.

In another example, the inner surface of the vest/liner is made of substantially similar material as the inner surface of the outer garment. Thus, when the vest/liner is attached to the outer garment, the vest/liner appears to be an integral part of the outer garment. This can provide a measure of security for a wearer who leaves the outer 10 garment unattended in that the outer garment appears to have no inner pocket(s).

In yet another example, the vest/liner comprises bulletproof and/or bullet resistant material(s). In this example, the vest/liner can function as a bulletproof vest while inconspicuously attached to the outer garment. Thus, while the vest/liner is attached to the outer garment it can be difficult to detect or discern that the wearer is wearing a 15 bulletproof vest.

In a fourth example, the vest/liner comprises material impervious to blade(s) (e.g., knife blades). Using a material impervious to blade(s) can, for example, increase physical protection for a wearer while the vest/liner is being worn. For example, the vest/liner can comprise any suitable material that is incapable of being cut or punctured 20 and/or resistance to being cut and/or punctured.

Another aspect of the present invention provides for the vest/liner to, optionally, include pocket(s) that are accessible from the inner surface of the vest/liner. In one example, one or more of the pocket(s) comprise means for securing (e.g., zipper, flexible hook and loop fastener system, snap, button(s) and/or, hook-and-eye *etc.*). In this 25 example, the vest/liner can thus facilitate secure storage of personal item(s) (e.g., mobile telephone, personal digital assistant, personal audio system, money, jewelry, keys, travel document(s), credit card(s), identification card(s) *etc.*).

In one example, one or more of the pocket(s) comprise a material impervious to blades. One or more of the pocket(s) can further comprise a locking mechanism, for 30 example, a zipper with a lock and/or wire tie. In this manner, the pocket(s) comprising a

material impervious to blades can impede unauthorized person(s) (e.g., thief) from access to content(s) of the pocket(s).

In another example, the pocket(s) are located generally symmetrically about a vertical axis at about the center of the vest/liner. In this example, weight can be substantially evenly distributed over a torso of the wearer, for example, for ease of carrying items. Thus, substantially even weight distribution of item(s) carried by a typical wearer about the wearer's torso can, for example, reduce the weight that otherwise is carried by either hand, e.g. in a briefcase or carry-on bag.

Yet another aspect of the present invention provides for at least a portion of the vest/liner to be coupled to an outer garment such that the vest/liner is "camouflaged" as part of the outer garment, for example, through the use of a flap that conceals the means by which the vest/liner is attached to the outer garment. Thus, the outer garment, while serving as a piece of outerwear, provides security to a wearer by not readily providing access to inner pocket(s). Additionally and/or alternatively, hidden seam(s) can be used to conceal the means by which the vest/liner is attached to the outer garment.

Other aspects of the present invention provides for a vest/liner having access slit(s), an outer garment comprising a garment cuff having a window area, an outer garment having a wrist instrument channel, a pocket sling system, a pocket having a zipper with a zipper stop, a pocket map system, and, an electronic port system.

To the accomplishment of the foregoing and related ends, certain illustrative aspects of the invention are described herein in connection with the following description and the annexed drawings. These aspects are indicative, however, of but a few of the various ways in which the principles of the invention may be employed and the present invention is intended to include all such aspects and their equivalents. Other advantages and novel features of the invention may become apparent from the following detailed description of the invention when considered in conjunction with the drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a perspective front view of a garment in accordance with an aspect of the present invention.

Fig. 2 is a perspective front view of a garment in accordance with an aspect of the present invention.

Fig. 3 is a perspective front view of a vest/liner in accordance with an aspect of the present invention.

5 Fig. 4 is a perspective view of the combined garment and vest/liner in accordance with an aspect of the present invention.

Fig. 5 is a perspective front view of a vest/liner in accordance with an aspect of the present invention.

10 Fig. 6 is a perspective view of a portion of a concealed vest/liner to garment interface in accordance with an aspect of the present invention.

Fig. 7 is a perspective view of a vest/liner in accordance with an aspect of the present invention.

Fig. 8 is a perspective view of a garment cuff in accordance with an aspect of the present invention.

15 Fig. 9 is a perspective view of a garment cuff in accordance with an aspect of the present invention.

Fig. 10 is a cross-sectional view of a garment cuff in accordance with an aspect of the present invention.

20 Fig. 11 is a perspective view of a garment sleeve in accordance with an aspect of the present invention.

Fig. 12 is a perspective view of a garment in accordance with an aspect of the present invention.

Fig. 13 is a perspective view of a sling system in accordance with an aspect of the present invention.

25 Fig. 14 is a perspective view of a sling system in accordance with an aspect of the present invention.

Fig. 15 is a perspective view of a sling system in accordance with an aspect of the present invention.

30 Fig. 16 is a perspective view of a pocket system in accordance with an aspect of the present invention.

Fig. 17 is a perspective view of a pocket in accordance with an aspect of the present invention.

Fig. 18 is a perspective view of a pocket having a zipper adapted to receive a lock in accordance with an aspect of the present invention.

5 Fig. 19 is a pocket map system in accordance with an aspect of the present invention.

Fig. 20 is an electronic port system in accordance with an aspect of the present invention.

10 Fig. 21 is a perspective view of an external pocket in accordance with an aspect of the present invention.

Fig. 22 is a perspective view of a pocket in accordance with an aspect of the present invention.

Fig. 23 is a perspective view of a portion of a lining and garment system in accordance with an aspect of the present invention.

15 Fig. 24 is a perspective view of a garment in accordance with an aspect of the present invention.

Fig. 25 is a perspective view of a collar portion of a garment in accordance with an aspect of the present invention.

20 Fig. 26 is a perspective view of a wire attachment system in accordance with an aspect of the present invention.

Fig. 27 is a cross-sectional view of an exemplary anchor in accordance with an aspect of the present invention.

Fig. 28 is a cross-section view of an exemplary anchor in accordance with an aspect of the present invention.

25

DETAILED DESCRIPTION OF THE INVENTION

The present invention is now described with reference to the drawings, wherein like reference numerals are used to refer to like elements throughout. In the following description, for purposes of explanation, numerous specific details are set forth in order to provide a thorough understanding of the present invention. It may be evident, however, that the present invention may be practiced without these specific details. In

other instances, well-known structures and devices are shown in block diagram form in order to facilitate describing the present invention.

As used in this application, "outer garment" is intended to refer to a garment suitable to be worn a man and/or a woman. For example, a garment can include an overcoat, a sport coat, a jacket, a parka, a blazer and/or similar type(s) of outerwear. "Garment" is intended to refer to an "outer garment", individually and/or in combination with a vest/liner and/or lining. "Lining" refers to a material sewn and/or attached to the outer garment that can conceal pocket(s) of the outer garment and provide a clean look to the inside of the outer garment. The lining is visible from the inside of the outer garment when the vest/liner is not attached.

Referring to Fig. 1, an outer garment 100 in accordance with an aspect of the present invention is illustrated. The outer garment 100 has a lining 102 and an outer surface 104. Thus, the lining 102 faces a wearer of the outer garment 100 and/or a vest/liner (not shown). For example, the outer garment 100 can be fashionably acceptable for either business and/or casual use. The lining 102 can provide a clean look to the inside of the outer garment 100.

As illustrated in Fig. 2, the outer garment 100 can, optionally, include inner pocket(s) 106. The inner pocket(s) 106 are generally accessible from the lining 102 of the outer garment 100. In one example, one or more of the inner pocket(s) 106 comprise means for securing 108 (*e.g.*, zipper, flexible hook and loop fastener system, snap, button(s) and/or, hook-and-eye *etc.*). In this example, the one or more inner pocket(s) 106 comprise means for securing 108 that facilitate secure storage of personal item(s) (*e.g.*, mobile telephone, personal digital assistant, personal audio system, money, jewelry, keys, travel document(s), credit card(s), identification card(s) *etc.*). For example, the inner pocket(s) 106 can be attached to the outer garment 100 and/or the lining 102. The inner pocket(s) 106 can be accessed through the lining 102.

Further, in combination with a removable vest/liner (not shown), the outer garment 100 facilitates a wearer to secure and/or conceal the inner pocket(s) 106 of the outer garment 100. For example, the inner pocket(s) 106 can be secured and concealed by the vest/liner before the wearer enters an airport security check point, thus enabling the wearer to submit the outer garment 100 for security x-ray without fear of spillage of

content(s) of the inner pocket(s) 106 (e.g., mitigation of lost and/or stolen content(s)). In this manner, the wearer of the outer garment 100 can, for example, expedite passage through airport security (e.g., by avoiding the necessity of having to empty pocket(s) of various metal object(s)).

5 In one example, the outer garment 100, the vest/liner and/or the inner pocket(s) 106 comprise a waterproof/breathable material that can protect item(s) stored from the elements.

10 The inner pocket(s) 106 can, optionally, be accessible from the outer surface 104 through concealed zipper(s) and/or semi-concealed slit(s). Further, the inner pocket(s) can include zipper(s) that are waterproof and/or seams that are sealed from water.

The inner pocket(s) 106 can, for example, "hang" between the lining 102 and the outer garment 100. This can facilitate item(s) to naturally hang (e.g., without unsightly bulges).

15 In one example, one or more of the inner pocket(s) 106 comprise a material impervious to blades. One or more of the inner pocket(s) 106 can further comprise a locking mechanism, for example, a zipper with a lock and/or wire tie. In this manner, the inner pocket(s) 106 comprising a material impervious to blades can impede unauthorized person(s) (e.g., thief) from access to content(s) of the inner pocket(s) 106.

20 In a second example, one or more of the inner pocket(s) 106 comprise a waterproof, anti-magnetic, heat sensitive, radiation protective and/or transparent material. For example, a heat sensitive material can facilitate operation of device(s) stored in the inner pocket(s) 106 that have heat sensitive controls (e.g., Soft Stitch Technology™, Apple iPod®). Additionally and/or alternatively, radiation protective material can protect and/or reduce unnecessary exposure of radiation associated with cellular or radio frequency transmitting devices.

25 In yet another example, the inner pocket(s) 106 are located generally symmetrically about a longitudinal axis at about the center of the outer garment 100. In this example, weight can be substantially evenly distributed over a torso of the wearer, for example, for ease of carrying items. Thus, substantially even weight distribution of item(s) carried by a typical wearer about the wearer's torso can facilitate, for example, to

reduce the weight that otherwise is carried by either hand, *e.g.* in a briefcase or carry-on bag.

In a fourth example, the outer garment 100 includes seven inner pockets 106 when worn separately from the vest/liner. Alternatively, there are only seven inner pockets 106/306 that are easily accessed when the vest/liner is attached to the outer garment 100. While there may be more than seven pockets in the outer garment (100) and vest/liner (300) in total, only seven can easily be accessed when the outer garment and vest/liner are worn in combination (Fig. 4). As demonstrated in other technological arts, and further referenced in the book “The Tipping Point,” seven is a quantity of items (*e.g.*, digits of a telephone number) which a human being can easily remember. Thus, by having exactly seven easily accessible pockets, a user of the outer garment 100 can easily remember the contents, if any, of each pocket.

In a fifth example, hidden pocket(s) 110 that are not readily accessible from the outer garment 100 or the lining 102 are provided. In this example, portion(s) of the lining are removable (*e.g.*, *via* zipper, flexible hook and loop fastener system, snap, button(s), magnets, and/or, hook-and-eye *etc.*) allowing access to one or more hidden pocket(s) 110.

Next, turning to Fig. 3, a vest/liner 300 in accordance with an aspect of the present invention is illustrated. The vest/liner 300 has an inner surface 302 and an outer surface 304. Thus, the inner surface 302 faces a wearer of the vest/liner 300.

The vest/liner 300 can be worn for business, casual and/or sport.

Fig. 4, in accordance with an aspect of the present invention, shows the vest/liner 300 attached to the outer garment 100, for example, *via* fastener(s) 310 (*e.g.*, zipper, flexible hook and loop fastener system, snap, button(s), magnets, and/or, hook-and-eye *etc.*). Thus, the vest/liner 300 can be worn attached to the outer garment 100 or detached from the outer garment 100, for example, at a wearer’s preference. Thus, in this example, the vest/liner 300 and/or the outer garment 100 can be worn individually.

In another example, the lining 302 of the vest/liner 300 is made of substantially similar material as the lining 102 of the outer garment 100. Thus, when the vest/liner 300 is attached to the outer garment 100, the vest/liner 300 appears to be an integral part of the outer garment 100. This can provide a measure of security for a wearer who leaves

the outer garment 100 unattended in that the outer garment 100 appears to have no inner pocket(s) 106.

In yet another example, the vest/liner 300 comprises bulletproof and/or bullet resistant material(s). In this example, the vest/liner 300 can function as a bulletproof vest while inconspicuously attached to the outer garment 100. Thus, while the vest/liner 300 is attached to the outer garment 100 it can be difficult to detect or discern that the wearer is wearing a bulletproof vest.

In a fourth example, the vest/liner 300 comprises material impervious to blade(s) (e.g., knife blades). Using a material impervious to blade(s) can, for example, increase physical protection for a wearer while the vest/liner 300 is being worn. For example, the vest/liner 300 can comprise any suitable material that is incapable of being cut or punctured and/or resistance to being cut and/or punctured.

Turning to Fig. 5, the vest/liner 300 can, optionally, include pocket(s) 306 that are accessible from the lining 302 of the vest/liner 300.

In one example, one or more of the pocket(s) 306 comprise means for securing 308 (e.g., zipper, flexible hook and loop fastener system, snap, button(s) and/or, hook-and-eye etc.). In this example, the vest/liner 300 can thus facilitate secure store of personal item(s) (e.g., mobile telephone, personal digital assistant, personal audio system, money, jewelry, keys, travel document(s), credit card(s), identification card(s) etc.).

In one example, one or more of the pocket(s) 306 comprise a material impervious to blades. One or more of the pocket(s) 306 can further comprise a locking mechanism, for example, a zipper with a lock and/or wire tie. In this manner, the pocket(s) 306 comprising a material impervious to blades can impede unauthorized person(s) (e.g., thief) from access to content(s) of the pocket(s) 306.

In a second example, one or more of the pocket(s) 306 comprise a waterproof, anti-magnetic, heat sensitive, radiation protective and/or transparent material. In yet another example, the pocket(s) 306 are located generally symmetrically about a vertical axis at about the center of the vest/liner 300. In this example, weight can be substantially evenly distributed over a torso of the wearer, for example, for ease of carrying items. Thus, substantially even weight distribution of item(s) carried by a typical wearer about

the wearer's torso can, for example, reduce the weight that otherwise is carried by either hand, *e.g.* in a briefcase or carry-on bag.

Referring briefly to Fig. 6, a portion of a concealed vest/liner to garment interface 500 in accordance with an aspect of the present invention is illustrated. In this example, 5 the vest/liner 300 can be "camouflaged" as part of the outer garment 100, for example, through the use of a flap 502 that conceals the means by which the vest/liner 300 is attached to the outer garment 100. Thus, the outer garment 100, while serving as a piece of outerwear, provides security to a wearer by not readily providing access to inner pocket(s) 106. Additionally and/or alternatively, hidden seam(s) can be used to conceal 10 the means by which the vest/liner 300 is attached to the outer garment 100, as well as the appearance of a flap.

Turning briefly to Fig. 7, the vest/liner 300 can, optionally, comprise access slit(s) 602. The access slit(s) 602 can facilitate access to inner pocket(s) 106 of the outer garment 100. In one example, the access slit(s) 602 include a fabric slit (*e.g.*, finished). 15 In another example, the access slit(s) 602 include a zippered slit.

The access slit(s) can be arranged to spatially correspond to the inner pocket(s) 106 of the outer garment 100. In this manner, when the vest/liner 300 is attached to the outer garment 100, a wearer can access the inner pocket(s) 106 of the outer garment 100 through one or more access slit(s) 602 of the vest/liner 300. Further, the access slit(s) 20 602 can be sewn using a hidden seam, so that they are virtually undetectable at a quick glance, thus, further facilitating security. Additionally and/or alternatively, when the vest/liner (300) is worn separately, the access slit(s) can be sewn using a hidden seam so they are virtually undetectable at a quick glance when viewing the outer surface of the garment. This further enhances the appearance of the vest/liner (300) as a stand alone 25 garment. Optionally, the access slit(s) 602 can include a flexible and/or expandable material sewn at either end of, or in full circumference of the slit(s) 602 that allows greater access to the outer garment 100.

In one example, the outer garment 100 and/or the vest/liner 300 comprises 30 material having anti-magnetic properties. Accordingly, electronic device(s) and/or magnetically sensitive item(s) (*e.g.*, floppy disk(s)) can be insulated from the magnetic fields that are commonly emitted by metal detectors and/or large electrical currents.

Turning to Fig. 8, a perspective view of a garment cuff 700 in accordance with an aspect of the present invention is illustrated. A flap 702 is hingedly coupled to the garment cuff 700. For example, the flap 702 can be coupled to the garment cuff 700 via a seam and/or fastener (e.g., zipper, flexible hook and loop fastener system, snap, button(s) and/or, hook-and-eye etc.). For example, one or both cuffs of the outer garment 100 can include a garment cuff 700.

The garment cuff 700 comprises a window area 704. In one example, the window area 704 is a hole through the garment cuff 700. In another example, the window area 704 comprises a transparent material (e.g., see-through vinyl). In yet another example, the window area comprises a semi-transparent material.

Optionally, the window area 704 can be waterproof, transparent, heat sensitive and/or anti-magnetic.

In one example, the flap 702 is fastenable, thus, selectively concealing or revealing the window area 704 facilitating, for example, viewing of wearer's wrist instrument. The term "wrist instrument" is intended to include any instrument capable of being affixed to a wearer's wrist. Examples of wrist instruments include a wristwatch, a barometer, a thermometer, a digital camera, a calculator etc.

For example, the flap 702 can be designed to appear as a cuff of the outer garment 100 when fastened (e.g., with little or no visible indication that the flap 702 is hingedly coupled to the outer garment 100). However, when a wearer desires to check and/or employ functionality of the wearer's wrist instrument, the wearer unfastens and peels back the flap to reveal a transparent view of at least a portion of the wrist instruction (e.g., face of a wristwatch). This feature can be especially useful in situations in which an individual is wearing gloves and manual dexterity is at a minimum. For example, this feature can be incorporated into both cuffs to accommodate left- and right-handed wrist instrument wearers, as well as to accommodate the wearer of multiple wrist instruments.

Turning to Fig. 9 and Fig. 10, a garment cuff 800 can include a wrist instrument channel 802 sewn into a cuff of the outer garment 100. The wrist instrument channel 802 can receive a wrist instrument and secure the wrist instrument to the outer garment 100. At least a portion of the wrist instrument can be exposed, covered by a transparent material, heat sensitive material, and/or radiation protective material. Additionally and/or

alternatively, at least a portion of the wrist instrument can be selectively concealed or revealed by a hingedly coupled flap, for example. In this example, since the wrist instrument is secured to the outer garment 100, increased travel efficiency, for example, can be achieved since the wearer would not have to remove the wrist instrument from the wearer's person in order to pass through a security checkpoint

5

10

Referring next to Fig. 11, a garment sleeve 850 can include a device pocket 860 that can receive a device (e.g., a mobile telephone, personal digital assistant, a MP3 player *etc.*) For example, a portion of the device pocket 860 can be made of transparent material, heat sensitive, and/or radiation protective material to facilitate viewing of the device, employing functionality of the device, and/or protecting the user from unnecessary radiation.

15

Next, referring to Fig. 12, a garment 900 in accordance with an aspect of the present invention is illustrated. The inner surface 902 of the garment 900 includes one or more tab(s) 904. The tab(s) 904 are adapted to receive a clip/fastener 906. The tab(s) 904 can be located at appropriate location of the inner surface of the garment 900, between an outer garment and a lining, and/or a vest/liner (not shown) (e.g., to facilitate routing of wire(s) from device(s) contained in pocket(s) of the garment 900 and/or vest/liner to I/O device(s)).

20

The clip/fastener 906 can securely attach a wire 908 to the garment 900. "Wire" refers to any connective and/or conductive material, for example, associated with an earpiece, a microphone, a headset, a hearing aid, or any other I/O device that can suitably be connected to a device physically located in a pocket of the garment 900 and/or a vest/liner (not shown).

25

The clip/fastener 906 secures the wire 908 (e.g., to the garment 900). Accordingly, the wearer can relieve tension of the wire 900 (e.g., in order to prevent the I/O device from becoming dislodged). Furthermore, the clip/fastener 906 can stabilize the I/O device so that the wearer is able to plug and unplug terminal end(s) of the wire 908, for example, when switching between electronic devices contained in various pockets of the garment 900 and/or vest/liner.

30

Alternatively and/or additionally, the exterior of the garment 900 can include one or more tabs 904 adapted to receive a clip/fastener 906. The clip/fastener 906 can be

employed to secure a wire to the external surface of the garment 900. For example, the clip/fasteners 906 could be located along the underside of a sleeve, at the forearm and inner biceps, while another is located at the collar of the garment 900. The wearer could then easily and detachably secure the wire to the external surface of the garment 900.

5 Referring to Fig. 13, a sling system 1000 in accordance with an aspect of the present invention is illustrated. The sling system 1000 facilitates secure attachment of a personal item, such as, for example, a cellular phone or an P3 player, to a pocket 1004. For example, the sling system 100 can attach to location(s) on the inside of a garment, vest/liner and/or between a garment and a lining.

10 The sling system 1000 includes a tether 1002 which is coupled to a garment and/or vest/liner (e.g., swively) in proximity to the pocket 1004 and/or attached to the pocket 1004. For example, the tether 1002 can be coupled *via* a ring 1006 (e.g., D-ring, O-ring, fabric loop, buckle, snap system, hitching mechanism, magnet etc.), the ring 1006 comprising metal, plastic, fabric, and/or any material of suitable strength to support the weight attached to it). Additionally, either or both end(s) of the tether 1002 can be coupled with a swivel 1008. The swivel reduces the potential for tangling of the tether 1002 (e.g., when the personal item is out of the pocket 1004).

15 The tether 1002 can comprise a clip 1010 at a distal end of the tether 1002. The tether 1002 can be of any material suitable for affixing the item to the pocket. The tether 1002 can be of suitable length to permit the wearer to use the item while it is tethered to the pocket 1004 and/or garment, but not so long that it hangs below the bottom of the garment, thus enabling the wearer to leave a tethered item hanging out of its pocket 1004 while keeping the item concealed under the garment.

20 For example, the tether 1002 can have clips at both ends for attaching to the ring and the item. Alternatively, the distal end of the tether 1002 can be attached to a pouch, further ensuring against loss or theft of the item placed therein and/or easy access to a personal digital assistant, MP3 player etc. (e.g., frequently used item(s)). In one example, a small panel/purse that can accommodate small item(s) (e.g., lipstick) can be attached to the distal end of the tether 1002.3

25 Referring to Fig. 14, the clip 1010 at the distal end of the tether 1002 can be attached to an integral but removable pouch 1014. The pouch 1014 can comprise any of

the materials mentioned herein (including but not limited to material that is bulletproof, impervious to blades, transparent, semi-transparent, permeable to audio, has anti-magnetic properties, radioactive protective *etc.*). The pouch 1014 can act as a purse or wallet to secure and manage smaller items such as would normally be secured in one pocket (*e.g.* cosmetics, money, loose change, credit cards, passport, ID, pictures, *etc.*).
5 For example, this system further reduces clutter both for the wearer's convenience and for expediting the wearer's passage through a security checkpoint. Furthermore, the pouch 1014 permits ease of access and increased security for the wearer. In another example, the pouch 1014 can be detached at the wearer's preference for use as a small purse.
10 This function of the pouch 1014 eliminates the need for the wearer to carry a separate purse when traveling, further reducing the number of external items of which the wearer must keep track and/or submit to a security scan.

Referring to Fig. 15, another aspect of the invention provides for a specialized sleeve 1016 that can be affixed to the distal end of the tether 1002. The sleeve 1016 can be specialized to fit (*e.g.*, snuggly) various electronic devices, such as, for example, a cellular phone or an mp3 player. In one example, the sleeve 1016 comprises a material having a degree of elasticity to facilitate a snug fit for a wide variety of devices, although the sleeve 1016 can comprise any material suitable for performing its intended purpose (including but not limited to material that is bulletproof, impervious to blades, transparent, semi-transparent, permeable to audio, has anti-magnetic and/or radioactive protective properties, *etc.*)
15 In one example, the sleeve 1016 is custom tailored to provide access to the visual display and/or functionality(ies) of the device contained therein, so that the wearer may view and manipulate the device without removing it from the sleeve 1016. In the case of electronic devices using audio headsets, they can easily attach to the
20 device and then anchored to the inner portion of the garment. Additionally and/or alternatively, they can hang loosely off of the device if a retractable mechanism is employed to wound the head set when not in use and/or to more accurately deploy the
25 appropriate length of cord necessary.

Referring to Fig. 16, a sling system 1100 in accordance with an aspect of the present invention is illustrated. The sling system 1100 facilitates secure attachment of a personal item to a pocket 1104.
30

The sling system 1100 includes a tether 1102 that is coupled to a garment and/or vest/liner (e.g., swively) in proximity to the pocket 1104. For example, the tether 1102 can be coupled *via* a ring 1106 (e.g., D-ring, O-ring, fabric loop, buckle, snap system, hitching mechanism, magnet *etc.*), the ring 1106 comprising metal, plastic, fabric, and/or any material of suitable strength to support the weight attached to it). Additionally the proximal end of tether 1102 can be coupled with to a tether retractor 1108, which is coupled to a swivel 1110. Thus, the tether retractor 1108 can be for example, a standard spring-loaded retracting device, which is detachably clipped to the swivel 1110 and/or ring 1106. In one example, the tether retractor 1108 is detachable (e.g., for laundering of the garment), quick access and/or detachment of a device.

The tether 1102 can comprise a clip 1112 at a distal end of the tether 1102. The tether 1102 can be of any material suitable for affixing the item to the pocket and/or garment. The tether 1102 can be of suitable length to permit the wearer to use the item while it is tethered to the pocket 1104 and/or garment, but not so long that it hangs below the bottom of the garment, thus enabling the wearer to leave a tethered item hanging out of its pocket 1104 while keeping the item concealed under the garment.

Optionally, the tether 1102 can be electrically conductive and facilitate data transfer, I/O transfer and/or power to and/or from item(s) at the distal end of the tether 1102. For example, when the tether 1102 is used between an outer garment and a lining, the tether 1102 can be used to hold a power source, fuel cell, battery(ies) *etc.*, thus, facilitating quick connect capability.

Referring to Fig. 17, a pocket 1200 in accordance with an aspect of the present invention is illustrated. The pocket 1200 includes a zipper 1202.

For example, the zipper 1202 can metal, plastic and/or any other suitable material. In one example, substantially all of the zippers 1202 of a garment and/or vest/liner are made of a non-metallic material. This can facilitate, for example expediting of the garment wearer's processing at a security checkpoint by eliminating unnecessary metal clutter that would otherwise appear on an x-ray scan of the garment. The reduction of clutter during the security scan can, for example, enable the security agent to better view item(s) contained within pocket(s) of the garment, thus reducing the risk of a

misinterpretation of a given item's identity and increasing the speed with which the wearer can pass through security.

The zipper 1202 can include a zipper stop 1204. The zipper stop 1204 prevents the zipper 1202 from fully closing, thus, allowing a gap through which a wire can pass thus facilitating connection of a device stored in the pocket to an exterior I/O device. The zipper stop 1204 can be placed to allow a suitable gap (e.g., about a quarter-inch).

Next, turning to Fig. 18, a pocket 1300 in accordance with an aspect of the present invention is illustrated. The pocket 1300 comprises a zipper 1302 adapted to receive a lock 1304. For example, the lock 1304 can be a keyed lock, a combination lock and/or a wire tie. The lock 1304 can facilitate mitigation of loss or theft of the wearer's personal items contained within the pocket 1300.

Turning to Fig. 19, a pocket map system 1400 in accordance with an aspect of the present invention is illustrated. The pocket map system 1400 includes a pocket 1402 and a indicator 1404. The indicator 1404 provides an indication of the content(s) of the pocket 1402.

The system 1400 facilitates mapping of content(s) of pocket(s) 1402 of a garment (not shown) (e.g., for recognition of the content(s) of the pocket 1402). "Mapping" refers to a suitable means of identifying content(s) of the pocket 1402.

In one example, the indicator 1404 comprises a colored tab and/or colored label, thus, facilitating a color-coded mapping of content(s). In another example, the indicator 1404 comprises a tab and/or label having alphanumeric character(s) representative of content(s) of the pocket 1402. In yet another example, the indicator 1404 comprises a tab and/or label having a graphical indication of the content(s) of the pocket 1402 (e.g., music note for an MP3 Player, a telephone for mobile phone, a key for keys etc.).

The indicators 1404 can be used to label and identify tether 1002 and/or tether 1102. This system of tether identification can be useful to a wearer having a plurality of tethers and facilitates the identification of the item at the distal end of the tether, whether the item is attached via the clip 1010 and/or clip 1112 or stored in the pouch 1014. In another example, the indicators 1404 can be used to label the pouch 1014. In yet another example, the entire tether 1002 and/or tether 1102 can be fashioned of a monochromatic material, no two tether 1002 and/or tether 1102 being of the same color, so that the

wearer can affix the tether 1002 and/or tether 1102 according to the wearer's preference to color-code or map the garment as described above.

Optionally, the indicators 1404 can be heat sensitive, for example, to facilitate turning on and/or off of a device connected to a tether 1102.

5 Referring next to Fig. 20, an electronic port system 1500 in accordance with an aspect of the present invention is illustrated. The system 1500 includes a pocket 1502 having a plug-in-port 1504.

10 The plug-in-port 1504 is a connector (*e.g.*, permanently affixed and/or removable from the pocket 1502) having a male end and female end adapted to connect an electronic device to an I/O device. A distal end of the plug-in-port 1504 is adapted to receive a male end of a connector 1506 from an I/O device. A proximal end of the plug-in-port 1504 is adapted to be received by a female end of device located in the pocket 1502.

15 The plug-in-port 1504 can, for example, be color-coded or marked in accordance with a "map" of the integrated pocket system as previously described. This feature can facilitate switching between devices that are stored within the garment, for example, mitigating the need to unfasten pocket(s) and fumble with a device. For example, the wearer may be listening to music on an mp3 player, which is securely fastened in a right-breast interior pocket, when the wearer feels a cell phone vibrate in a left-breast interior pocket: without having to change headsets or earpieces, the wearer simply unplugs the headset from, for example, a plug-in-port 1504 (*e.g.*, green) in a right-breast pocket and plugs into, for example, a plug-in-port 1504 (*e.g.*, orange) on a left-breast pocket. Thus, the wearer requires only one I/O device having an earpiece and a microphone to connect to multiple devices secured within the garment and/or liner.

20 Turning to Fig. 21, a perspective view of an external pocket 1600 in accordance with an aspect of the present invention is illustrated. At least a portion of the external pocket 1600 can comprise a transparent and/or semi-semi-transparent material, for example, to, facilitate viewing of content(s) of the external pocket 1600. The external pocket(s) 1600 can be located anywhere on the external surface of the garment. The specific locations of the external pocket 1600 described herein are for exemplary purposes only.

Additionally and/or alternatively, the external pocket 1600 can comprise a pliable and/or heat sensitive material facilitating manipulation of functionality(ies) of device(s) located within the external pocket 1600. The external pocket 1600 can, optionally, include a hingedly coupled flap 1602 for securing content(s) of the external pocket 1600.

5 For example, the flap 1602 can comprise a transparent and/or semi-transparent material to facilitate viewing of content(s) of the external pocket 1600. Furthermore, the external pocket 1600 and/or the flap 1602 can comprise a material that is permeable to audio signals, so that, for example, the wearer can hear the ringer of a cell phone and answer *via* speakerphone without removing the phone from the external pocket 1600. This aspect of the present invention is particularly useful to a wearer in cold weather or one having limited dexterity at the time of an incoming call.

10

For example, a transparent external pocket 1600 for a cell phone can be located on the inner forearm of a garment. When the wearer's arm hangs freely, the pocket is upright and the phone contained therein is inverted. Upon hearing the ringer or feeling the vibratory "ringer," the wearer merely bends the wearer's arm at the elbow with the palm facing upward, and the wearer can view a display of the cell phone and decide whether to answer the incoming call. Similarly, the wearer can glance at the cell phone to check for indicator light(s) and/or display (*e.g.*, voicemail indication).

15

The external pocket 1600 can be placed in proximity to a user's body (*e.g.*, on a sleeve) in order to facilitate transmission of sound and/or vibration, thus, allowing the user to be alerted to information associated with device(s) (*e.g.*, phone ringing and/or vibrating).

20

Alternatively, the flap 1602 can comprise a window area to permit the wearer to view the device located within the pocket.

25 Referring to Fig. 22, a pocket 1700 in accordance with an aspect of the present invention is illustrated. A portion 1710 comprises material (*e.g.*, transparent material and/or mesh) that allows for viewing of the content(s) of the pocket 1700 from an outer surface 1720 *via* an access slit 1730, or by pulling the contents, in an inside-out manner, from a pocket accessible from the outside of the garment (not shown). In this case, the contents can be viewed, and may or may not be removed when pulled from the outer portion of the garment. Similar to 1700, the pocket accessible from the outside of the

30

garment would be made from material (e.g., transparent material and/or mesh) that allows for viewing of the content(s) of pocket 1700. Content(s) of the pocket 1700 may be removable from the inner or an outer portion of the garment (not shown) (e.g., through lining).

5 Next, turning to Fig. 23, a portion of a lining and garment system 1800 in accordance with an aspect of the present invention is illustrated. The system 1800 includes an outer garment 1810 and a lining 1820. Generally, the lining 1820 is affixed to the outer garment 1810 (e.g., sewn, zipper, flexible hook and loop fastener system, snap, button(s) and/or, hook-and-eye *etc.*); however, at least a portion of the lining can be loosened to allow access to an area between the outer garment 1810 and the lining 1820.
10 The loosening can allow access, for example, loosely hung item(s) (e.g., tethered item(s)), a secret sling, and/or wiring that is concealed between shell and lining. Thus, the system 1800 can facilitate secret and/or hidden storage of item(s). The system 1800 can further allowing easy access between the outer garment 1810 and the lining 1820 to facilitate access and/or specific placement of wiring, for example, for power, I/O, data transfer *etc.*
15

20 Referring next to Fig. 24, a garment 1900 in accordance with an aspect of the present invention is illustrated. The garment 1900 includes seven pockets 1910. Those skilled in the art will recognize that the pockets 1910 can be placed at any suitable location on/in the garment 1910.

25 Turning to Fig. 25, a collar portion 2000 of a garment in accordance with an aspect of the present invention is illustrated. The collar portion includes a through hole 2010 that accommodates wire(s) 2020. The wire(s) 2020 can be hidden under the collar 2010 and/or fastenably attached to the underside of the collar 2010 *via* guide(s) 2030 (e.g., a flexible hook and loop fastener system, ring(s) *etc.*) Thus, a user of the garment can insert a wire associated with headphones through the through hole 2010 and guide(s) 2030 thus significantly hiding the wire from sight, while allowing easy access and/or detachment or the wires. Headsets, or earbuds can conveniently be housed under or on the collar, or in a specially fabricated pocket on the outer surface of the garment in a
30 location near the collar.

Next, referring to Fig. 26, a wire attachment system 2100 in accordance with an aspect of the present invention is illustrated. The system 2100 includes anchor(s) 2110 that securely hold a wire to a garment 2130.

For example, the wire attachment system 2100 can be employed with wire for a headset of a mobile phone and/or an MP3 player. The wire can be wound around the anchor(s) 2110 to secure and provide an amount of wire length to comfortably wear the headset. If not in use, the head set can be stored in a pocket, elastic loop, magnets etc. located in the upper extremity of the garment, either inside or outside, located near the users head and/or ear. These pockets, elastic loops, magnets, etc. allow the headset to securely rest and be easily accessible/removable by the user (not shown). The mobile phone and/or MP3 player can securely be housed in adjacent pocket and/or or sling system (1002/1010/1016).

Turning briefly to Fig. 27, a cross-section of an exemplary anchor made from plastic, steel, and/or rubber etc., in accordance with an aspect of the present invention is illustrated. In this example, the anchor is generally tapered from at least one edge 2150, 2160, thus creating a section 2170 (*e.g.*, concave) adapted to receive a wire (*e.g.*, wire wound securely around anchor 2110 or self retracted for spring actuated, positional stop anchors).

Referring to Fig. 28, a cross-section of another exemplary anchor 2200 another in accordance with an aspect of the present invention is illustrated. In this example, the anchor 2200 includes a first side 2210 and a second side 2220. The first side 2210 can be attached to a garment.

In one example, the first side 2210 and the second side are generally circular with a diameter of the first side 2210 being less than a diameter of the second side 2220. The side attaching to the garment (2210, 2160) can have traditional button holes, hooks, rivets, or a quick-connect system that allows the anchor to easily attach/detach from the garment etc. Generally speaking, the anchor should be low profile and not ad discomfort to the user.

What has been described above includes examples of the present invention. It is, of course, not possible to describe every conceivable combination of components or methodologies for purposes of describing the present invention, but one of ordinary skill

in the art may recognize that many further combinations and permutations of the present invention are possible. Accordingly, the present invention is intended to embrace all such alterations, modifications and variations that fall within the spirit and scope of the appended claims. Furthermore, to the extent that the term "includes" is used in either the detailed description or the claims, such term is intended to be inclusive in a manner similar to the term "comprising" as "comprising" is interpreted when employed as a transitional word in a claim.

5